



SEQUENCE LISTING

<110> Andersen, Peter  
Skjot, Rikke Louise Vinther  
Okkels, Li Mei Meng  
Brock, Inger  
Oettinger, Thomas

<120> Nucleic Acid Fragments and Polypeptide Fragments Derived from M.  
Tuberculosis

<130> 670001-2002.6

<140> 09/872,505  
<141> 2001-06-01

<150> 09/804,980  
<151> 2001-03-13

<150> US09/615,947  
<151> 2000-07-13

<150> US09/246,191  
<151> 1998-12-30

<150> 60/070,488  
<151> 1998-01-05

<150> 60/144,011  
<151> 1999-07-15

<150> PCT/DK00/00398  
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Asn Ala Pro Arg Arg Asn Arg Val Gly Arg Gln His Gly Trp Pro Ala  
20 25 30

96

gac gtt ccg tcc gcc gag cag cgc cgc gcc caa cgg cag cgc gac ctc 144  
Asp Val Pro Ser Ala Glu Gln Arg Arg Ala Gln Arg Gln Arg Asp Leu  
35 40 45

gag gct atc cgc cga gcg tac gcc gag atg gtg gcg aca tca cac gaa 192  
Glu Ala Ile Arg Arg Ala Tyr Ala Glu Met Val Ala Thr Ser His Glu  
50 55 60

atc gac gac aca gcc gaa ctg gcg ctg ttg tcg atg cat ctc gac 240  
Ile Asp Asp Asp Thr Ala Glu Leu Ala Leu Ser Met His Leu Asp  
65 70 75 80

gat gag cag cgc cgg ctt gag gcg ggg atg aag ctc ggc tgg cat ccg 288  
Asp Glu Gln Arg Arg Leu Glu Ala Gly Met Lys Leu Gly Trp His Pro  
85 90 95

tat cac ttc ccc gac gaa ccc gac agc aaa cag tga 324  
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<212> PRT

<213> Mycobacterium tuberculosis

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Asp Val Pro Ser Ala Glu Gln Arg Arg Ala Gln Arg Gln Arg Asp Leu  
35 40 45  
Glu Ala Ile Arg Arg Ala Tyr Ala Glu Met Val Ala Thr Ser His Glu  
50 55 60  
Ile Asp Asp Asp Thr Ala Glu Leu Ala Leu Leu Ser Met His Leu Asp  
65 70 75 80  
Asp Glu Gln Arg Arg Leu Glu Ala Gly Met Lys Leu Gly Trp His Pro  
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gag ctt gtc ggc ggc ccg cca gtc gag gct tcg gcc gcc gcg ctg gcc 96  
Glu Leu Val Gly Gly Pro Pro Val Glu Ala Ser Ala Ala Leu Ala

20	25	30	
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gcg ttg gtc cgc gct gtg gcg gag tcg cac ggc gtc gcg gcc gtt ttg Ala Leu Val Arg Ala Val Ala Glu Ser His Gly Val Ala Ala Val Leu 50	55	60	192
ttc gcc gcg acg gcc gcc gcg gcg gcc gtc gac cgg ggt gat ccg Phe Ala Ala Thr Ala Ala Ala Ala Val Asp Arg Gly Asp Pro 65	70	75	240
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Gly Asp Ala Ala Gly Ala Trp Arg Thr Ala Ala Val Glu Leu Ala Arg 35	40	45	
Ala Leu Val Arg Ala Val Ala Glu Ser His Gly Val Ala Ala Val Leu 50	55	60	
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cca atg ctt gcg gcg gcc gcg gga tgg cag acg ctt tcg gcg gct ctg Pro Met Leu Ala Ala Ala Gly Trp Gln Thr Leu Ser Ala Ala Leu 30	35	40	150
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75 80 85	
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90 95 100 105	
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110 115 120	
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125 130 135	
acc gag atg gat tat ttc atc cgt atg tgg aac cag gca gcc ctg gca Thr Glu Met Asp Tyr Phe Ile Arg Met Trp Asn Gln Ala Ala Leu Ala	486
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170 175 180 185	
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190 195 200	
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205 210 215	
atg agc ggc ccg atg cag cag ctg acc cag ccg ctg cag cag gtg acg Met Ser Gly Pro Met Gln Gln Leu Thr Gln Pro Leu Gln Gln Val Thr	726
220 225 230	
tcg ttg ttc agc cag gtg ggc acc ggc ggc ggc aac cca gcc gac Ser Leu Phe Ser Gln Val Gly Gly Thr Gly Gly Asn Pro Ala Asp	774
235 240 245	
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250 255 260 265	

cat ccg ctg gct ggt gga tca ggc ccc agc gcg ggc gcg ggc ctg ctg		870	
His Pro Leu Ala Gly Gly Ser Gly Pro Ser Ala Gly Ala Gly Leu Leu			
270	275	280	
cgc gcg gag tcg cta cct ggc gca ggt ggg tcg ttg acc cgc acg ccg		918	
Arg Ala Glu Ser Leu Pro Gly Ala Gly Ser Leu Thr Arg Thr Pro			
285	290	295	
ctg atg tct cag ctg atc gaa aag ccg gtt gcc ccc tcg gtg atg ccg		966	
Leu Met Ser Gln Leu Ile Glu Lys Pro Val Ala Pro Ser Val Met Pro			
300	305	310	
gcg gct gct gcc gga tcg tcg gcg acg ggt ggc gcc gct ccg gtg ggt		1014	
Ala Ala Ala Ala Gly Ser Ser Ala Thr Gly Gly Ala Ala Pro Val Gly			
315	320	325	
gcg gga gcg atg ggc cag ggt gcg caa tcc ggc tcc acc agg ccg		1062	
Ala Gly Ala Met Gly Gln Gly Ala Gln Ser Gly Gly Ser Thr Arg Pro			
330	335	340	345
ggt ctg gtc gcg ccg gca ccg ctc gcg cag gag cgt gaa gaa gac gac		1110	
Gly Leu Val Ala Pro Ala Pro Leu Ala Gln Glu Arg Glu Glu Asp Asp			
350	355	360	
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20 25 30			
Gly Trp Gln Thr Leu Ser Ala Ala Asp Ala Gln Ala Val Glu Leu			
35 40 45			
Thr Ala Arg Leu Asn Ser Leu Gly Glu Ala Trp Thr Gly Gly Ser			
50 55 60			
Asp Lys Ala Leu Ala Ala Ala Thr Pro Met Val Val Trp Leu Gln Thr			
65 70 75 80			
Ala Ser Thr Gln Ala Lys Thr Arg Ala Met Gln Ala Thr Ala Gln Ala			
85 90 95			
Ala Ala Tyr Thr Gln Ala Met Ala Thr Thr Pro Ser Leu Pro Glu Ile			
100 105 110			
Ala Ala Asn His Ile Thr Gln Ala Val Leu Thr Ala Thr Asn Phe Phe			
115 120 125			
Gly Ile Asn Thr Ile Pro Ile Ala Leu Thr Glu Met Asp Tyr Phe Ile			
130 135 140			
Arg Met Trp Asn Gln Ala Ala Leu Ala Met Glu Val Tyr Gln Ala Glu			
145 150 155 160			
Thr Ala Val Asn Thr Leu Phe Glu Lys Leu Glu Pro Met Ala Ser Ile			

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Leu Asp Pro Gly Ala Ser Gln Ser Thr	Thr Asn Pro Ile Phe Gly Met		
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195	200	205	
Thr Gln Thr Leu Gly Gln Leu Gly Glu Met Ser Gly Pro Met Gln Gln			
210	215	220	
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225	230	235	240
Gly Thr Gly Gly Asn Pro Ala Asp Glu Glu Ala Ala Gln Met Gly			
245	250	255	
Leu Leu Gly Thr Ser Pro Leu Ser Asn His Pro Leu Ala Gly Gly Ser			
260	265	270	
Gly Pro Ser Ala Gly Ala Gly Leu Leu Arg Ala Glu Ser Leu Pro Gly			
275	280	285	
Ala Gly Gly Ser Leu Thr Arg Thr Pro Leu Met Ser Gln Leu Ile Glu			
290	295	300	
Lys Pro Val Ala Pro Ser Val Met Pro Ala Ala Ala Gly Ser Ser			
305	310	315	320
Ala Thr Gly Gly Ala Ala Pro Val Gly Ala Gly Ala Met Gly Gln Gly			
325	330	335	
Ala Gln Ser Gly Gly Ser Thr Arg Pro Gly Leu Val Ala Pro Ala Pro			
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Asp Asp Trp			
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 Met Thr His Lys Arg Thr Lys Arg Gln Pro Ala Ile Ala Ala Gly Leu  
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<210> 8  
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 Ala Ile Ala Ala Gly Leu Asn Ala Pro Arg Arg Asn Arg Val Gly Arg  
 1 5 10 15  
 Gln His

<210> 9  
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 Arg Asn Arg Val Gly Arg Gln His Gly Trp Pro Ala Asp Val Pro Ser  
 1 5 10 15  
 Ala Glu

<210> 10  
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<400> 10  
Pro Ala Asp Val Pro Ser Ala Glu Gln Arg Arg Ala Gln Arg Gln Arg  
1 5 10 15  
Asp Leu

<210> 11  
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<212> PRT  
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<400> 11  
Arg Ala Gln Arg Gln Arg Asp Leu Glu Ala Ile Arg Arg Ala Tyr Ala  
1 5 10 15  
Glu Met

<210> 12  
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Ile Arg Arg Ala Tyr Ala Glu Met Val Ala Thr Ser His Glu Ile Asp  
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Asp Asp

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Thr Ser His Glu Ile Asp Asp Asp Thr Ala Glu Leu Ala Leu Leu Ser  
1 5 10 15  
Met His

<210> 14  
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1 5 10 15  
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1 5 10 15  
Tyr His

<210> 16  
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<400> 16  
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1 5 10 15  
Lys Gln

<210> 17  
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<400> 17  
Met Ser Gly His Ala Leu Ala Ala Arg Thr Leu Leu Ala Ala Ala Asp  
1 5 10 15  
Glu Leu

<210> 18  
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<212> PRT  
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Ala Ala Asp Glu Leu Val Gly Gly Pro Pro Val Glu Ala Ser Ala Ala  
1 5 10 15  
Ala Leu

<210> 19  
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<212> PRT  
<213> *Mycobacterium tuberculosis*

<400> 19  
Ala Ser Ala Ala Ala Leu Ala Gly Asp Ala Ala Gly Ala Trp Arg Thr  
1 5 10 15  
Ala Ala

<210> 20  
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Ala Trp Arg Thr Ala Ala Val Glu Leu Ala Arg Ala Leu Val Arg Ala  
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Val Ala

<210> 21  
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<213> Mycobacterium tuberculosis

<400> 21  
Leu Val Arg Ala Val Ala Glu Ser His Gly Val Ala Ala Val Leu Phe  
1 5 10 15  
Ala Ala

<210> 22  
<211> 18  
<212> PRT  
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<400> 22  
Val Leu Phe Ala Ala Thr Ala Ala Ala Ala Val Asp Arg Gly Asp  
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<210> 23  
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Val Tyr

<210> 24  
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<210> 25  
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Glu Thr Ala Val Asn Thr Leu Phe Glu Lys Leu Glu Pro Met Ala Ser  
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<210> 26  
<211> 18  
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Leu Glu Pro Met Ala Ser Ile Leu Asp Pro Gly Ala Ser Gln Ser Thr  
1 5 10 15  
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<210> 27

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<212> PRT

<213> Mycobacterium tuberculosis

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<212> PRT

<213> Mycobacterium tuberculosis

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10

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Pro Ala

<210> 29

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<212> PRT

<213> Mycobacterium tuberculosis

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10

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Gly Glu

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<211> 18

<212> PRT

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Thr Gln

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<212> PRT

<213> Mycobacterium tuberculosis

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1

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10

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Phe Ser

<210> 32

<211> 18

<212> PRT

<213> Mycobacterium tuberculosis

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<212> PRT  
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<210> 37  
<211> 18  
<212> PRT  
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<210> 38  
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<210> 39  
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<210> 44

<211> 18  
<212> PRT  
<213> *Mycobacterium tuberculosis*

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<212> PRT  
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<210> 47  
<211> 18  
<212> PRT  
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Asp Ala

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<212> PRT  
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<210> 49  
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<212> PRT  
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Gly Gly

<210> 50

<211> 18

<212> PRT

<213> Mycobacterium tuberculosis

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Thr Pro

<210> 51

<211> 18

<212> PRT

<213> Mycobacterium tuberculosis

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Ser Thr

<210> 52

<211> 18

<212> PRT

<213> Mycobacterium tuberculosis

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<210> 53

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<212> PRT

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<210> 54

<211> 18

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<213> Mycobacterium tuberculosis

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Ala Ala

<210> 55

<211> 18

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<213> Mycobacterium tuberculosis

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Leu Thr

<210> 56  
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Thr Asn

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<210> 58  
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<223> Primer PB2654c

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<223> Primer Rv2653-F

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